

Tomato Open field Quantitative-Brazil



Tomato Open field Quantitative

Crop cycle: 211 Days
Yield goal: 140.00 ton/ha
Plot: Brazil
Plot size: 1 ha





Base dressing

Nutrient supply for crop





Stage	Days	Macronutrients(kg/ha)			Secondary Nutrients (kg/ha)			Micronutrients (gram/ha)						
		N_Total	P2O5	K2O	CaO	MgO	SO4	Fe	Mn	Zn	Cu	Mo	B	
Base dressing	1	40.00	72.00	200.00	17.70	0.00	61.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Fertilizers per stage

Fertilizers application (ha/day)

 <p>Multi-nPK 13-2-44 Multi-K Enriched 222.93 kg</p>	 <p>Haifa SOP Potassium Sulphate 112.36 kg</p>	 <p>Haifa MKP Soluble monopotassium phosphate 129.89 kg</p>
 <p>Haifa Cal GG Calcium Nitrate 66.78 kg</p>		

Fertilizers amounts for growth stage (per plot)

	 <p>Multi-nPK 13-2-44 Multi-K Enriched</p>	 <p>Haifa SOP Potassium Sulphate</p>	 <p>Haifa MKP Soluble monopotassium phosphate</p>	 <p>Haifa Cal GG Calcium Nitrate</p>
Amount	222.93 kg	112.36 kg	129.89 kg	66.78 kg








Establishment

Nutrient supply for crop

Stage	Days	Macronutrients(kg/ha)			Secondary Nutrients (kg/ha)			Micronutrients (gram/ha)					
		N_Total	P2O5	K2O	CaO	MgO	SO4	Fe	Mn	Zn	Cu	Mo	B
Establishment	20	40.00	24.00	37.50	37.64	17.64	2.52	198.00	99.00	33.00	24.75	16.50	50.00

Fertilizers per stage

Fertilizers application (ha/day)

 Multi-npK 13-2-44 Multi-K Enriched 2.27 kg	 Haifa SOP Potassium Sulphate 231 gram	 Haifa MKP Soluble monopotassium phosphate 2.22 kg
 Haifa Mag / Magnisal Magnesium Nitrate 5.69 kg	 Haifa Cal GG Calcium Nitrate 7.10 kg	 Haifa Micro Combi 138 gram
 Borax - Disodium Tetraborate Decahydrate 22 gram		

Nutrigation system



Volume: **1000 liter**
Content: **Phosphorus**
Injection volume per day: **23.70 l/day**
Fertilizer concentration: **20 %**
Tanks per stage: **tanks**



Volume: **1000 liter**
Content: **Calcium**
Injection volume per day: **64.65 l/day**
Fertilizer concentration: **20 %**
Tanks per stage: **tanks**







- Multi-npK 13-2-44 Multi-K Enriched **95.65 kg**
- Haifa SOP Potassium Sulphate **9.75 kg**
- Haifa MKP Soluble monopotassium phosphate **93.67 kg**
- Borax - Disodium Tetraborate Decahydrate **929 gram**

- Haifa Mag / Magnisal Magnesium Nitrate **88.02 kg**
- Haifa Cal GG Calcium Nitrate **109.85 kg**
- Haifa Micro Combi **2.13 kg**

Stock solution nutrients content:

Tanks	Macronutrients (gram/liter)			Secondary Nutrients (gram/liter)			Micronutrients (mg/liter)					
	N_Total	P2O5	K2O	CaO	MgO	SO4	Fe	Mn	Zn	Cu	Mo	B
Phosphorus Tank 1	12.72	50.62	79.10	-	-	5.31	-	-	-	-	-	110
Calcium Tank 2	26.27	-	-	29.11	13.64	-	150	80	30	20	10	-

Fertilizers amounts for growth stage (per plot)

						
Multi-npK 13-2-44 Multi-K Enriched	Haifa SOP Potassium Sulphate	Haifa MKP Soluble monopotassium phosphate	Haifa Mag / Magnisal Magnesium Nitrate	Haifa Cal GG Calcium Nitrate	Haifa Micro Combi	Borax - Disodium Tetraborate Decahydrate
45.34 kg	4.62 kg	44.40 kg	113.82 kg	142.04 kg	2.76 kg	440 gram

Amount

Vegetative growth

Nutrient supply for crop

Stage	Days	Macronutrients(kg/ha)			Secondary Nutrients (kg/ha)			Micronutrients (gram/ha)					
		N_Total	P2O5	K2O	CaO	MgO	SO4	Fe	Mn	Zn	Cu	Mo	B
Vegetative growth	40	60.00	42.51	75.00	52.03	22.03	0.00	500.00	250.00	83.33	62.50	41.67	130.00

Fertilizers per stage

Fertilizers application (ha/day)

Multi-npK 13-2-44 Multi-K Enriched 2.75 kg	Haifa MKP Soluble monopotassium phosphate 1.94 kg	Haifa Mag / Magnisal Magnesium Nitrate 3.55 kg
Haifa Cal GG Calcium Nitrate 4.91 kg	Haifa Micro Combi 174 gram	Borax - Disodium Tetraborate Decahydrate 29 gram

Nutrigation system



Volume: **1000 liter**
Content: **Phosphorus**
Injection volume per day: **23.59 l/day**
Fertilizer concentration: **20 %**
Tanks per stage: **tanks**



Volume: **1000 liter**
Content: **Calcium**
Injection volume per day: **43.18 l/day**
Fertilizer concentration: **20 %**
Tanks per stage: **tanks**

Multi-npK 13-2-44 Multi-K Enriched **116.64 kg**

Haifa MKP Soluble monopotassium phosphate **82.15 kg**

Borax - Disodium Tetraborate Decahydrate **1.21 kg**

Haifa Mag / Magnisal Magnesium Nitrate **82.30 kg**

Haifa Cal GG Calcium Nitrate **113.68 kg**

Haifa Micro Combi **4.02 kg**

Stock solution nutrients content:

Tanks	Macronutrients (gram/liter)			Secondary Nutrients (gram/liter)			Micronutrients (mg/liter)					
	N_Total	P2O5	K2O	CaO	MgO	SO4	Fe	Mn	Zn	Cu	Mo	B
Phosphorus Tank 1	15.51	45.05	79.48	-	-	-	-	-	-	-	-	140
Calcium Tank 2	26.26	-	-	30.12	12.76	-	290	140	50	40	20	-

Fertilizers amounts for growth stage (per plot)

Multi-npK 13-2-44 Multi-K Enriched	Haifa MKP Soluble monopotassium phosphate	Haifa Mag / Magnisal Magnesium Nitrate	Haifa Cal GG Calcium Nitrate	Haifa Micro Combi	Borax - Disodium Tetraborate Decahydrate
110.04 kg	77.52 kg	142.16 kg	196.36 kg	6.96 kg	1.16 kg

Amount







Flowering to fruit set

Nutrient supply for crop

Stage	Days	Macronutrients(kg/ha)			Secondary Nutrients (kg/ha)			Micronutrients (gram/ha)					
		N_Total	P2O5	K2O	CaO	MgO	SO4	Fe	Mn	Zn	Cu	Mo	B
Flowering to fruit set	30	80.00	36.00	75.00	64.06	20.00	0.00	500.00	250.00	83.33	62.50	41.67	130.00

Fertilizers per stage

Fertilizers application (ha/day)

 Multi-npK 13-2-44 Multi-K Enriched 5.66 kg	 Haifa MAP - Mono Ammonium Phosphate 1.78 kg	 Haifa Mag / Magnisal Magnesium Nitrate 4.30 kg
 Haifa Cal GG Calcium Nitrate 8.06 kg	 Haifa Micro Combi 231 gram	 Borax - Disodium Tetraborate Decahydrate 38 gram

Nutrigation system



Volume: **1000 liter**
Content: **Phosphorus**
Injection volume per day: **37.38 l/day**
Fertilizer concentration: **20 %**
Tanks per stage: **tanks**



Volume: **1000 liter**
Content: **Calcium**
Injection volume per day: **62.95 l/day**
Fertilizer concentration: **20 %**
Tanks per stage: **tanks**

Multi-npK 13-2-44 Multi-K Enriched	151.31 kg
Haifa MAP - Mono Ammonium Phosphate	47.67 kg
Borax - Disodium Tetraborate Decahydrate	1.02 kg

Haifa Mag / Magnisal Magnesium Nitrate	68.32 kg
Haifa Cal GG Calcium Nitrate	128.00 kg
Haifa Micro Combi	3.68 kg

Stock solution nutrients content:

Tanks	Macronutrients (gram/liter)			Secondary Nutrients (gram/liter)			Micronutrients (mg/liter)					
	N_Total	P2O5	K2O	CaO	MgO	SO4	Fe	Mn	Zn	Cu	Mo	B
Phosphorus Tank 1	25.84	32.10	66.88	-	-	-	-	-	-	-	-	120
Calcium Tank 2	27.01	-	-	33.92	10.59	-	260	130	40	30	20	-

Fertilizers amounts for growth stage (per plot)

 Multi-npK 13-2-44 Multi-K Enriched	 Haifa MAP - Mono Ammonium Phosphate	 Haifa Mag / Magnisal Magnesium Nitrate	 Haifa Cal GG Calcium Nitrate	 Haifa Micro Combi	 Borax - Disodium Tetraborate Decahydrate
169.68 kg	53.46 kg	129.03 kg	241.74 kg	6.93 kg	1.14 kg

Amount







Fruit filling (1st harvest) -

Nutrient supply for crop


Stage	Days	Macronutrients(kg/ha)			Secondary Nutrients (kg/ha)			Micronutrients (gram/ha)					
		N_Total	P2O5	K2O	CaO	MgO	SO4	Fe	Mn	Zn	Cu	Mo	B
Fruit filling (1st harvest) -	30	99.57	35.57	187.50	60.00	20.00	0.00	500.00	250.00	83.33	62.50	41.67	130.00

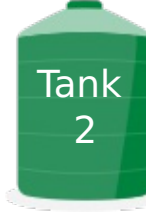
Fertilizers per stage

Fertilizers application (ha/day)

 Multi-nPK 13-2-44 Multi-K Enriched 12.76 kg	 Haifa MKP Soluble monopotassium phosphate 1.79 kg	 Haifa Mag / Magnisal Magnesium Nitrate 4.30 kg
 Haifa Cal GG Calcium Nitrate 7.55 kg	 Haifa Micro Combi 231 gram	 Borax - Disodium Tetraborate Decahydrate 38 gram

Nutrigation system

 Tank 1
Volume: **1000 liter**
Content: **Phosphorus**
Injection volume per day: **72.96 l/day**
Fertilizer concentration: **20 %**
Tanks per stage: **tanks**

 Tank 2
Volume: **1000 liter**
Content: **Calcium**
Injection volume per day: **60.40 l/day**
Fertilizer concentration: **20 %**
Tanks per stage: **tanks**

- Multi-nPK 13-2-44 Multi-K Enriched **174.95 kg**
- Haifa MKP Soluble monopotassium phosphate **24.52 kg**
- Borax - Disodium Tetraborate Decahydrate **523 gram**

- Haifa Mag / Magnisal Magnesium Nitrate **71.21 kg**
- Haifa Cal GG Calcium Nitrate **124.96 kg**
- Haifa Micro Combi **3.83 kg**

Stock solution nutrients content:

Tanks	Macronutrients (gram/liter)			Secondary Nutrients (gram/liter)			Micronutrients (mg/liter)					
	N_Total	P2O5	K2O	CaO	MgO	SO4	Fe	Mn	Zn	Cu	Mo	B
Phosphorus Tank 1	23.27	16.25	85.67	-	-	-	-	-	-	-	-	60
Calcium Tank 2	26.85	-	-	33.11	11.04	-	280	140	50	30	20	-

Fertilizers amounts for growth stage (per plot)

	 Multi-nPK 13-2-44 Multi-K Enriched	 Haifa MKP Soluble monopotassium phosphate	 Haifa Mag / Magnisal Magnesium Nitrate	 Haifa Cal GG Calcium Nitrate	 Haifa Micro Combi	 Borax - Disodium Tetraborate Decahydrate
Amount	382.92 kg	53.67 kg	129.03 kg	226.41 kg	6.93 kg	1.14 kg

Flowering (4th cluster) - (6th cluster)

Nutrient supply for crop

Stage	Days	Macronutrients(kg/ha)			Secondary Nutrients (kg/ha)			Micronutrients (gram/ha)					
		N_Total	P2O5	K2O	CaO	MgO	SO4	Fe	Mn	Zn	Cu	Mo	B
Flowering (4th cluster) - (6th cluster)	30	0.00	0.00	0.00	0.00	0.00	0.00	500.00	250.00	83.33	62.50	41.67	130.00

Fertilizers per stage

Fertilizers application (ha/day)



Haifa Micro Combi
231 gram

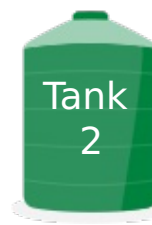


Borax - Disodium Tetraborate Decahydrate
38 gram

Nutrigation system



Volume: **1000 liter**
Content: **Phosphorus**
Injection volume per day: **0.19 l/day**
Fertilizer concentration: **20 %**
Tanks per stage: **tanks**



Volume: **1000 liter**
Content: **Calcium**
Injection volume per day: **1.16 l/day**
Fertilizer concentration: **20 %**
Tanks per stage: **tanks**

Borax - Disodium Tetraborate Decahydrate **200.00 kg**

Haifa Micro Combi **200.00 kg**

Stock solution nutrients content:

Tanks	Macronutrients (gram/liter)			Secondary Nutrients (gram/liter)			Micronutrients (mg/liter)					
	N_Total	P2O5	K2O	CaO	MgO	SO4	Fe	Mn	Zn	Cu	Mo	B
Phosphorus Tank 1	-	-	-	-	-	-	-	-	-	-	-	22700
Calcium Tank 2	-	-	-	-	-	-	14400	7200	2400	1800	1200	-

Fertilizers amounts for growth stage (per plot)



Haifa Micro Combi

6.93 kg



Borax - Disodium Tetraborate Decahydrate

1.14 kg

Amount







Fruit filling (2nd harvest)

Nutrient supply for crop


Stage	Days	Macronutrients(kg/ha)			Secondary Nutrients (kg/ha)			Micronutrients (gram/ha)					
		N_Total	P2O5	K2O	CaO	MgO	SO4	Fe	Mn	Zn	Cu	Mo	B
Fruit filling (2nd harvest)	30	60.00	12.00	150.00	17.40	5.40	0.00	198.00	99.00	33.00	24.75	16.50	50.00


Fertilizers per stage

Fertilizers application (ha/day)

 Multi-nPK 13-2-44 Multi-K Enriched 11.31 kg	 Haifa MAP - Mono Ammonium Phosphate 285 gram	 Haifa Mag / Magnisal Magnesium Nitrate 1.16 kg
 Haifa Cal GG Calcium Nitrate 2.19 kg	 Haifa Micro Combi 92 gram	 Borax - Disodium Tetraborate Decahydrate 15 gram

Nutrigation system

 Tank 1
Volume: **1000 liter**
Content: **Phosphorus**
Injection volume per day: **58.06 l/day**
Fertilizer concentration: **20 %**
Tanks per stage: **tanks**

 Tank 2
Volume: **1000 liter**
Content: **Calcium**
Injection volume per day: **17.21 l/day**
Fertilizer concentration: **20 %**
Tanks per stage: **tanks**

Multi-nPK 13-2-44 Multi-K Enriched	194.84 kg
Haifa MAP - Mono Ammonium Phosphate	4.91 kg
Borax - Disodium Tetraborate Decahydrate	253 gram

Haifa Mag / Magnisal Magnesium Nitrate	67.50 kg
Haifa Cal GG Calcium Nitrate	127.17 kg
Haifa Micro Combi	5.33 kg

Stock solution nutrients content:

Tanks	Macronutrients (gram/liter)			Secondary Nutrients (gram/liter)			Micronutrients (mg/liter)					
	N_Total	P2O5	K2O	CaO	MgO	SO4	Fe	Mn	Zn	Cu	Mo	B
Phosphorus Tank 1	26.50	6.89	86.12	-	-	-	-	-	-	-	-	30
Calcium Tank 2	26.80	-	-	33.70	10.46	-	380	190	60	50	30	-

Fertilizers amounts for growth stage (per plot)

					
Multi-nPK 13-2-44 Multi-K Enriched	Haifa MAP - Mono Ammonium Phosphate	Haifa Mag / Magnisal Magnesium Nitrate	Haifa Cal GG Calcium Nitrate	Haifa Micro Combi	Borax - Disodium Tetraborate Decahydrate
339.36 kg	8.55 kg	34.86 kg	65.67 kg	2.76 kg	450 gram

Amount

Harvest - Final

Nutrient supply for crop

Stage	Days	Macronutrients(kg/ha)			Secondary Nutrients (kg/ha)			Micronutrients (gram/ha)					
		N_Total	P2O5	K2O	CaO	MgO	SO4	Fe	Mn	Zn	Cu	Mo	B
Harvest - Final	30	20.00	12.00	75.00	15.00	0.00	33.07	100.00	50.00	17.00	13.00	8.00	30.00

Fertilizers per stage

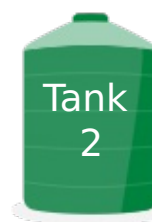
Fertilizers application (ha/day)

Haifa SOP Potassium Sulphate 2.02 kg	Haifa MKP Soluble monopotassium phosphate 661 gram	Multi-npK 13-2-44 Multi-K Enriched 2.81 kg
Haifa Cal GG Calcium Nitrate 1.89 kg	Borax - Disodium Tetraborate Decahydrate 9 gram	Micro Cu 15% EDTA 3 gram
Micro Fe 13% EDTA 26 gram	Micro Mn 13% EDTA 13 gram	Micro Zn 15% EDTA 4 gram
Sodium Molybdate 40% 1 gram		

Nutrigation system



Volume: **1000 liter**
Content: **Phosphorus**
Injection volume per day: **28.12 l/day**
Fertilizer concentration: **20 %**
Tanks per stage: **tanks**



Volume: **1000 liter**
Content: **Calcium**
Injection volume per day: **10.03 l/day**
Fertilizer concentration: **20 %**
Tanks per stage: **tanks**

Haifa SOP Potassium Sulphate	73.47 kg
Haifa MKP Soluble monopotassium phosphate	24.01 kg
Multi-npK 13-2-44 Multi-K Enriched	102.20 kg
Borax - Disodium Tetraborate Decahydrate	320 gram

Haifa Cal GG Calcium Nitrate	195.26 kg
Micro Cu 15% EDTA	299 gram
Micro Fe 13% EDTA	2.65 kg
Micro Mn 13% EDTA	1.33 kg
Micro Zn 15% EDTA	391 gram
Sodium Molybdate 40%	70 gram

Stock solution nutrients content:

Tanks	Macronutrients (gram/liter)			Secondary Nutrients (gram/liter)			Micronutrients (mg/liter)					
	N_Total	P2O5	K2O	CaO	MgO	SO4	Fe	Mn	Zn	Cu	Mo	B
Phosphorus Tank 1	13.59	14.53	90.81	-	-	40.04	-	-	-	-	-	40
Calcium Tank 2	30.27	-	-	51.74	-	-	340	170	60	40	30	-

Fertilizers amounts for growth stage (per plot)

Haifa SOP Potassium Sulphate	Haifa MKP Soluble monopotassium phosphate	Multi-npK 13-2-44 Multi-K Enriched	Haifa Cal GG Calcium Nitrate	Borax - Disodium Tetraborate Decahydrate	Micro Cu 15% EDTA	Micro Fe 13% EDTA	Micro Mn 13% EDTA	Micro Zn 15% EDTA	Sodium Molybdate 40%
60.69 kg	19.83 kg	84.42 kg	56.61 kg	270 gram	90 gram	780 gram	390 gram	120 gram	30 gram

Total nutrient supply for season

Stage	Days	Macronutrients(kg/ha)			Secondary Nutrients (kg/ha)			Micronutrients (gram/ha)						Irrigation	
		N_Total	P2O5	K2O	CaO	MgO	SO4	Fe	Mn	Zn	Cu	Mo	B	Interval (Days)	Volume (m3/ha/day)
Base dressing	1	40.00	72.00	200.00	17.70	0.00	61.24	0.00	0.00	0.00	0.00	0.00	0.00	1	1
Establishment	20	40.00	24.00	37.50	37.64	17.64	2.52	198.00	99.00	33.00	24.75	16.50	50.00	1	1
Vegetative growth	40	60.00	42.51	75.00	52.03	22.03	0.00	500.00	250.00	83.33	62.50	41.67	130.00	1	1
Flowering to fruit set	30	80.00	36.00	75.00	64.06	20.00	0.00	500.00	250.00	83.33	62.50	41.67	130.00	1	1
Fruit filling (1st harvest) -	30	99.57	35.57	187.50	60.00	20.00	0.00	500.00	250.00	83.33	62.50	41.67	130.00	1	1
Flowering (4th cluster) - (6th cluster)	30	0.00	0.00	0.00	0.00	0.00	0.00	500.00	250.00	83.33	62.50	41.67	130.00	1	1
Fruit filling (2nd harvest)	30	60.00	12.00	150.00	17.40	5.40	0.00	198.00	99.00	33.00	24.75	16.50	50.00	1	1
Harvest - Final	30	20.00	12.00	75.00	15.00	0.00	33.07	100.00	50.00	17.00	13.00	8.00	30.00	1	1
Total	211	399.57	234.08	800.00	263.83	85.07	96.83	2496.00	1248.00	416.32	312.50	207.68	650.00		

Total for season per plot

Stage	Base dressing	Establishment	Vegetative growth	Flowering to fruit set	Fruit filling (1st harvest) -	Flowering (4th cluster) - (6th cluster)	Fruit filling (2nd harvest)	Harvest - Final	Total
Multi-nPK 13-2-44 Multi-K Enriched	222.93 kg	45.34 kg	110.04 kg	169.68 kg	382.92 kg	-	339.36 kg	84.42 kg	1.4 ton
Haifa SOP Potassium Sulphate	112.36 kg	4.62 kg	-	-	-	-	-	60.69 kg	177.67 kg
Haifa MAP - Mono Ammonium Phosphate	-	-	-	53.46 kg	-	-	8.55 kg	-	62.01 kg
Haifa MKP Soluble monopotassium phosphate	129.89 kg	44.40 kg	77.52 kg	-	53.67 kg	-	-	19.83 kg	325.31 kg
Haifa Mag / Magnisal Magnesium Nitrate	-	113.82 kg	142.16 kg	129.03 kg	129.03 kg	-	34.86 kg	-	548.90 kg
Haifa Cal GG Calcium Nitrate	66.78 kg	142.04 kg	196.36 kg	241.74 kg	226.41 kg	-	65.67 kg	56.61 kg	995.61 kg
Sodium Molybdate 40%	-	-	-	-	-	-	-	30 gram	30 gram
Haifa Micro Combi	-	2.76 kg	6.96 kg	6.93 kg	6.93 kg	6.93 kg	2.76 kg	-	33.27 kg
Borax - Disodium Tetraborate Decahydrate	-	440 gram	1.16 kg	1.14 kg	1.14 kg	1.14 kg	450 gram	270 gram	5.74 kg
Micro Cu 15% EDTA	-	-	-	-	-	-	-	90 gram	90 gram
Micro Fe 13% EDTA	-	-	-	-	-	-	-	780 gram	780 gram
Micro Mn 13% EDTA	-	-	-	-	-	-	-	390 gram	390 gram



Micro Zn
15% EDTA

-

-

-

-

-

-

-

120 gram

**120
gram**